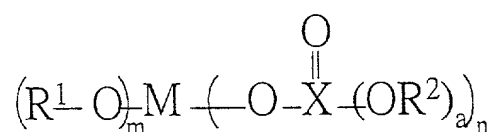


**WHAT IS CLAIMED IS:**

1. A conductive composition exhibiting PTC behavior, comprising:

- (a) at least one polymer;
- (b) at least one conductive filler dispersed in the polymer; and
- (c) a coupling agent having a structure as follows:



wherein M represents a metal atom or a silicon; R<sup>1</sup> and R<sup>2</sup> represent a substituted or unsubstituted alkyl group; X represents a sulfur or a phosphorous; a, m and n represent integers of 0 to 2.

2. The conductive composition of Claim 1, wherein the polymer is selected from the group consisting of epoxy resin, polyethylene, polypropylene, polyoctylene and its copolymer or the mixture thereof.

3. The conductive composition of Claim 1, wherein the conductive filler is selected from carbon black, metal or ceramic.

4. The conductive composition of Claim 1, wherein the conductive filler is selected from the group consisting of carbon black, nickel, silver, gold, graphite, titanium carbide, tungsten carbide and the mixture thereof.

5. The conductive composition of Claim 1, wherein the conductive filler is in a grain, flake, fiber or powder form.

6. The conductive composition of Claim 1, wherein the parameter M of the coupling agent is selected from the group consisting of

titanium, zirconium, molybdenum, platinum, silicon, palladium and nickel.

7. The conductive composition of Claim 1, wherein the coupling agent is preferably a complex of titanium or zirconium.

8. The conductive composition of Claim 1, wherein the volume percentage of the coupling agent is from approximately 0.05% through 5%.

9. The conductive composition of Claim 1, wherein the volume percentage of the coupling agent is preferably from approximately 0.1% through 1%.

20250320 08:32:00